

CHAPTER THREE - NATURAL SETTING. (Pocahontas County)

Roscoe W. Brown Arbovale WVA

Part 1

Sept-27 -1940

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From the stand point of climate Pocahontas might be divided in two parts, that is, highlands and valleys or lowlands. Being a very mountainous country with high elevations and located on the western side of the main Alleghenies, it is subject to severe winters. the valleys, however, being protected on either side, have less severe winters. During the summer months the weather is ideal seldom averaging over 70 degrees Fahrenheit during July the warmest month of the year.

Because of the wide range in elevation and the varied directions at which the mountains and valleys lie, climatic differences within the county are great. Through the western and northern parts, the winters are cold, and the summers are cool with relatively few hot days; the lower Greenbrier River Valley and the ridge and Valley country to the east have less severe winters and considerably higher summer temperatures. With a few exceptions the nights are cool and ideal for sleeping.

The results of killing frosts have been observed in a few places as late as June 20, and considerable frost damage to tender vegetation have been observed even in July and August. Frost along the large streams and valleys in the spring and fall often prevents the severe frost damage that occurs in the adjoining uplands.

The direction of the prevailing air currents and their modifications by physiography often give a temperature variation of as much as 10 degrees within a distance of one or two miles. The Climate of Pocahontas County is typical of a great upland mass and characterized by a range of temperature that is not affected by nearness to the sea or other modifying influences.

Since the virgin forest timber is practically all taken out of Pocahontas - County , the winds have become stronger ; the air tends to move lengthwise of the long valley of the Greenbrier River , and the winds are deflected by the topography of the country so that at times they blow at right angles to their normal course winds in general blow harder at high altitudes , at night, and in the winter time,

Cyclones are not a common occurrence in Pocahontas County and very few wind storms and floods that are out of the ordinary.

According to the Weather Bureau station at Marlinton, situated at an elevation of 2131 feet, the annual (average) rainfall is 47.26 inches, with average depth of snow 33.7 inches, and the mean temperature is 48.1 F Degrees

This, however, is not representative of conditions in the plateau sections of the north-eastern part of the County. The Pickens station in Randolph County is more indicative of the north-eastern part of Pocahontas County, it shows an average annual rainfall of more than 60 inches and a snowfall of 100 inches.

The rainfall is well distributed through the year . It is greatest during the year, summer, when needed for growing crops and pasture, and least in fall and winter

The heaviest snow fall is usually in January and February.

The average frost-free period reported at Marlinton, is $4\frac{1}{2}$ months, between May 16 and October 1st. The last killing frost reported was June 17 th and the earliest Sept 6th. (these figures are quoted from the Soil Survey of Pocahontas County issued Feb 1938).

It has always been a common saying and belief, by the old farmers of Pocahontas County that the East Wind will kill their buck-wheat or injure it to the extent that it won't fill, make straw but not much grain.

Monthly, Annual, and Mean Precipitation in inches at Marlington.

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S. L. Brown Observer

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1893	.....	5.49	1.72	2.91	4.47	5.80	.....	.....	...	5.32	1.99	1.91	.....
1894	1.81	3.39	1.84	2.06	...	2.69	.....	.....	...	...	1.84	.....
1895	....	1.05	1.46	4.41	240	.....	.....	.....	1.35	1.82	4.14	.....
1896	1.45	5.26	6.99	1.82	3.74	7.71	7.80	3.28	488	1.22	4.93	1.08	45.76
1897	2.17	5.88	5.21	2.85	7.06	5.59	5.65	2.74	0.80	0.95	4.08	4.64	47.62
1898	5.61	1.47	5.23	4.32	5.27	7.50	6.76	9.15	3.33	4.54	3.85	3.71	60.70
1899	3.26	5.23	6.28	1.60	7.68	1.92	2.95	3.43	4.01	1.56	0.83	3.09	41.93
1900	1.99	5.22	4.99	2.25	2.80	5.32	5.69	2.42	2.57	1.90	7.11	2.99	45.18
1901	5.98	0.97	3.06	6.13	5.11	8.77	8.59	8.03	.....	.....	.....	.....
1902	....	....	....	...	...	....	....	...	3.69	...	...	...	....
1903	.....	4.04	1.79	4.55	2.88	3.30	1.83	1.52	0.93	2.44	...	...
1904	4.11	3.10	.....	1.12	3.43	2.98	.....	...	.....	.....	.....	.....
1905	....	....	3.27	2.05	3.91	7.57	8.25	2.60	....	.....	.....	.....
1906	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1907	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1908	3/22	..322	.....	.....	.....	.....	.....	.....	.....	.....	.....	.....
1909	.....	.....	.....	.....	.....	.....	.....	.....	1.59	3.31	1.90	3.34	....
1910	4.32	2.75	0.59	2.50	2.67	7.38	7.09	5.58	3.56	2.03	1.14	3.63	48.23
1911	7.21	2.23	4.77	4.48	1.35	1.97	2.07	6.54	3.61	5.96	3.66	3.55	47.40
1912	2.46	2.80	6.12	3.17	4.52	3.45	2.67	1.88	4.56	1.53	2.18	4.20	3954
1913	4.42	2.70	5.80	3.75	5.20	2.85	4.70	3.74	2.02	5.43	3.05	2.75	46.41
1914	2.51	3.19	2.54	4.58	1.54	2.37	3.73	5.22	1.75	3.70	1.10	5.30	37.53
1915	7.42	4.16	1.33	1.86	3.34	4.46	3.90	4.20	4.10	4.47	2.82	4.18	46.24
1916	4.09	3.51	4.48	3.10	3.72	5.32	7.17	4.78	4.31	1.90	1.75	3.38	47.88
1917	4.63	3.62	7.40	2.70	4.09	2.23	7.22	2.07	3.30	3.29	0.94	2.11	45.67

continued on the other side,

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1918	6.44	2.98	6.33	6.50	4.38	10.11	4.62	5.60	4.73	6.64	1.92	5.18	63.62
1919	5.84	3.41	4.69	3.11	6.71	7.01	9.20	4.58	1.96	4.43	4.99	5.21	60.54
1920	4.03	2.78	5.04	5.56	3.05	5.53	5.24	8.90	3.40	0.80	4.75	4.37	53.45
1921	3.48	1.59	3.49	1.63	3.15	4.14	3.09	3.36	3.45	4.26	4.44	4.62	40.700
1922	3.28	5.49	6.13	3.33	5.19	4.66	5.34	6.57	0.95	1.67	1.01	6.26	49.88
1923	4.64	4.11	4.38	4.31	2.78	3.44	5.30	4.89	2.92	1.53	4.01	4.82	47.13
1924	5.26	3.41	3.65	3.53	6.49	4.54	5.06	5.85	7.68	0.10	3.11	3.75	52.43
1925	4.53	1.64	3.94	2.85	2.05	4.38	6.40	2.48	2.27	6.93	4.16	1.93	43.50
1926	4.93	3.94	4.27	3.08	4.57	3.10	7.03	10.56	3.00	5.44	3.60	7.40	60.92
1927	2.74	6.68	2.83	7.84	2.60	4.05	4.56	5.55	1.29	4.28	4.03	4.78	51.23
Means													
	4.08	3.50	4.30	3.45	3.97	4.74	5.31	4.90	3.10	3.11	2.93	3.88	47.27
Average Number Rainy Days.	11	10	10	11	11	11	14	12	6	7	7	10	120

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1918	6.44	2.98	6.33	6.50	4.38	10.11	4.62	5.60	4.73	6.64	1.92	5.18	63.62
1919	5.84	3.41	4.69	3.11	6.71	7.01	9.20	4.58	1.96	4.43	4.99	5.21	60.54
1920	4.03	2.78	5.04	5.56	3.05	5.53	5.24	8.90	3.40	0.80	4.75	4.37	53.45
1921	3.48	1.59	3.49	1.63	3.15	4.14	3.09	3.36	3.45	4.26	4.44	4.62	40.700
1922	3.28	5.49	6.13	3.33	5.19	4.66	5.34	6.57	0.95	1.67	1.01	6.26	49.88
1923	4.64	4.11	4.38	4.31	2.78	3.44	5.30	4.89	2.92	1.53	4.01	4.82	47.13
1924	5.26	3.41	3.65	3.53	6.49	4.54	5.06	5.85	7.68	0.10	3.11	3.75	52.43
1925	4.53	1.64	3.94	2.85	2.05	4.38	6.40	2.48	2.27	6.93	4.16	1.93	43.50
1926	4.93	3.94	4.27	3.08	4.57	3.10	7.03	10.56	3.00	5.44	3.60	7.40	60.92
1927	2.74	6.68	2.83	7.84	2.60	4.05	4.56	5.55	1.29	4.28	4.03	4.78	51.23
Means													
	4.08	3.50	4.30	3.45	3.97	4.74	5.31	4.90	3.10	3.11	2.93	3.88	47.27
Average Number Rainy Days.	11	10	10	11	11	11	14	12	6	7	7	10	120

Monthly and Annual Precipitation In Inches at Arbavale .
 from 1924 to August 1940 no days missing.
 H.S.Sutton Observer.

Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1925	1.63	1.64	3.16	2.05	2.83	2.68	6.67	1.23	3.14	4.78	3.36	1.24	37.37
1926	2.97	2.50	2.09	.48	2.84	2.39	6.49	6.85	3.00	4.23	3.16	4.76	42.36
1927	2.04	4.96	1.43	6.58	1.69	3.72	4.31	5.72	1.15	3.72	3.05	3.57	41.94
1928	2.22	1.81	2.36	3.50	1.59	7.15	5.01	4.73	3.18	1.53	3.43	1.54	39.05
1929	3.09	0.97	2.79	3.30	6.79	3.80	2.30	2.44	0.73	6.05	3.95	1.08	36.29
1930	0.76	1.74	2.00	1.96	1.09	2.72	1.48	1.95	1.36	0.50	1.63	2.43	19.62
1931	0.97	1.99	2.73	2.02	4.21	3.20	4.88	7.08	2.91	1.11	1.39	2.89	35.38
1932	3.73	4.42	4.10	1.80	3.64	3.63	6.41	2.31	1.34	4.17	3.62	1.86	41.03
1933	3.09	3.23	3.92	4.05	5.25	2.52	7.47	3.67	1.59	1.41	0.95	2.26	39.41
1934	2.06	0.00	3.15	2.00	2.40	2.83	2.10	3.37	5.77	1.23	4.65	2.08	31.64
1935	2.68	1.75	5.74	2.52	5.68	5.76	6.55	6.58	3.86	1.30	3.35	1.15	46.92
1936	2.17	1.23	3.30	1.55	2.29	3.50	4.83	2.32	2.84	3.78	1.02	3.92	32.85
1937	6.32	1.69	0.69	3.08	2.58	2.90	4.40	4.00	2.28	7.85	1.03	0.43	37.23
1938	0.89	2.08	2.28	1.78	5.41	5.10	2.28	1.93	5.48	0.65	3.93	0.65	32.74
1939	2.70	5.61	3.33	3.89	2.94	4.70	9.48	1.96	1.93	2.31	0.16	1.37	39.74
1940	0.79	1.72	2.90	3.48	5.04	7.82	5.11	4.37	...	...	...	...	31.23

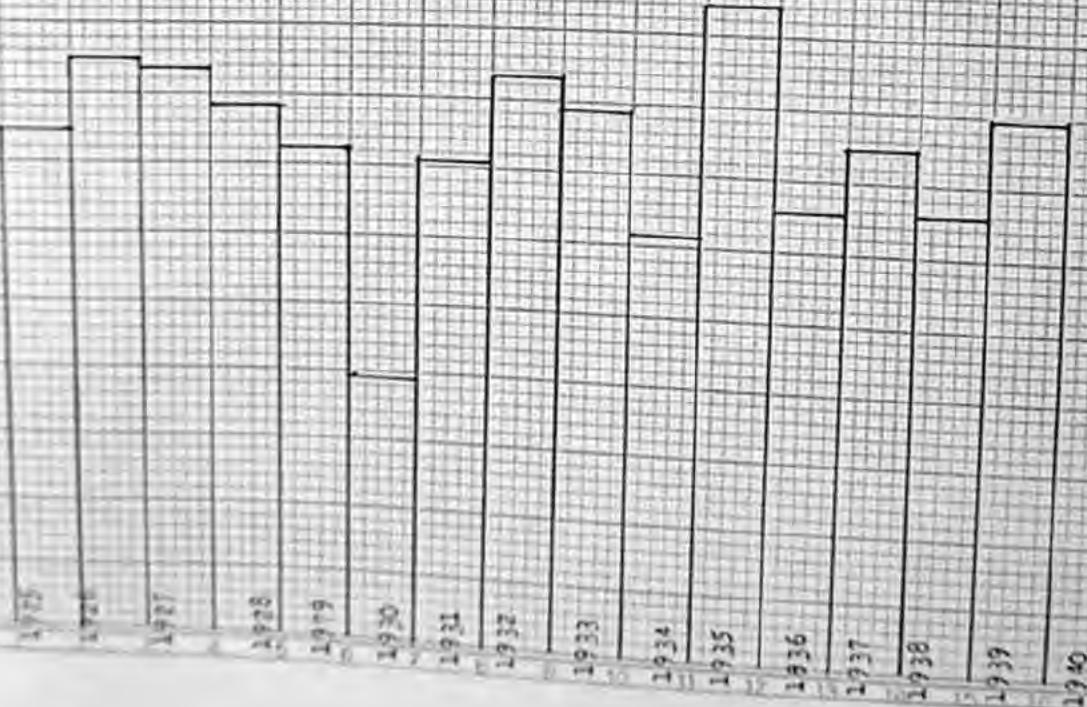
Graph Showing the Annual Precipitation in Inches at Arbovale,
from 1924 to August 1940, No Days missing

H.S.Sutton Observer.

Elevation 2727 feet from Sea level

Inches.

50
45
40
35
30
25
20
15
10
5
0



(12)

Monthly and Annual Snowfall in inches at Arbovale
 from 1924 to April 1940 no days missing.
 H.S.Sutton Observer.

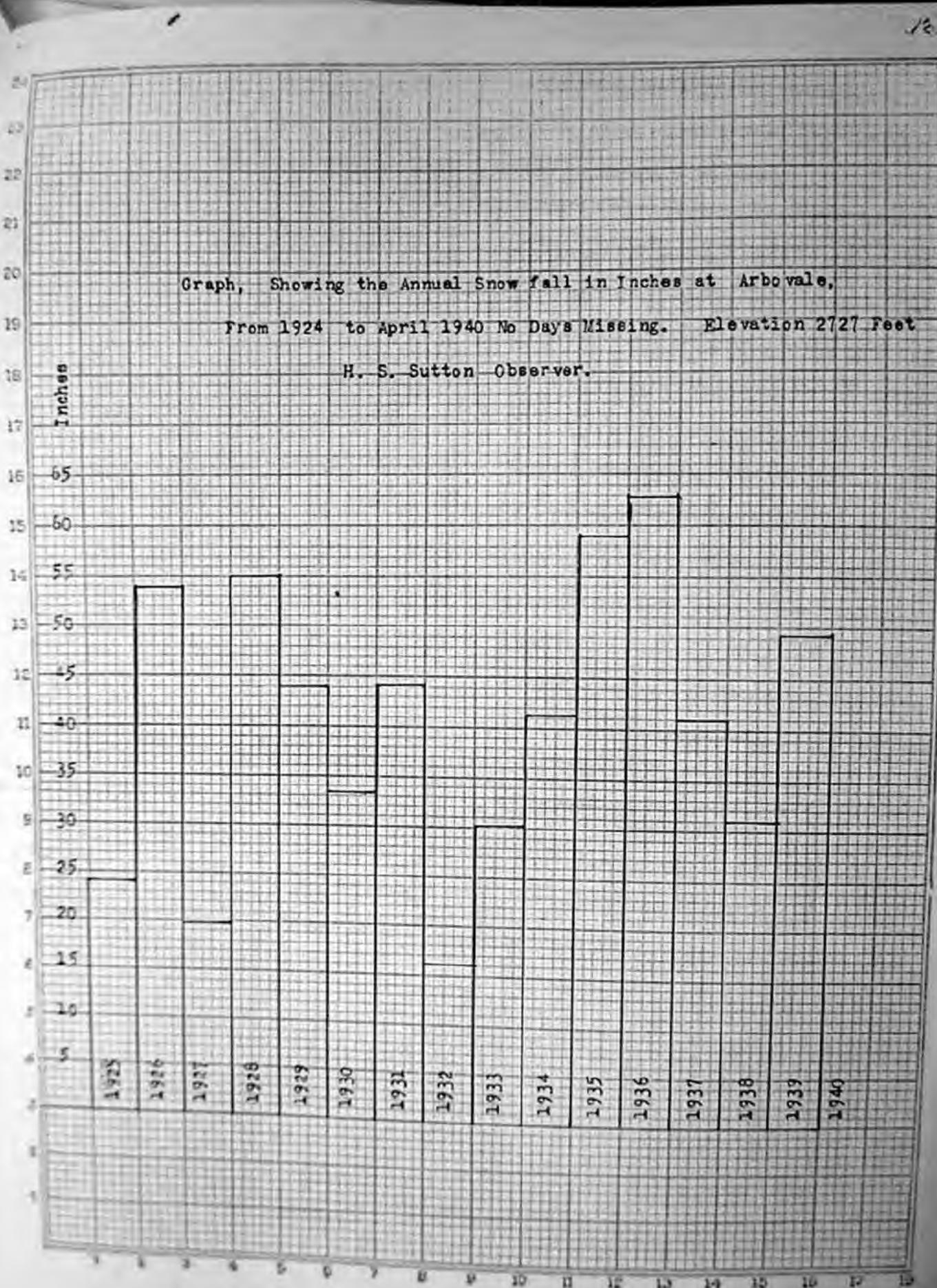
Year	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec	Annual
1925	22.0	T	T	T	T	.....	.....	.....	.....	T	T	2.0	24.00
1926	12.50	15.00	13.00	12.50	.....	.....	.....	.....	.....	.....	1.00	.....	54.00
1927	6.00	6.00	...	1.50	.....	.....	.....	.....	5.00	1.50	.....	.....	20.0
1928	2.00	5.50	15.50	18.00	.....	.....	.....	.....	.....	T	11.00	3.00	55.00
1929	5.00	15.00	6.00	1.50	.....	.....	.....	.....	.....	5.50	11.00	44.00	
1930	8.00	3.00	T	3.50	.....	.....	.....	.....	2.00	5.50	11.50	33.50	
1931	5.50	6.50	19.00	14.50	T	.....	.....	.....	.....	T	T	4.75	44.25
1932	1.00	4.50	9.00	1.25	.....	.....	.....	.....	0.50	0.25	..	16.50	
1933	5.00	2.50	5.00	0.25	.....	.....	.....	.....	.....	9.50	9.00	30.25	
1934	2.00	17.00	11.00	2.00	.....	.....	.....	.....	.....	T	1.00	8.50	41.50
1935	18.50	4.00	3.00	4.00	.....	.....	.....	.....	.....	4.00	26.00	59.50	
1936	8.00	16.50	33.00	2.50	.....	.....	.....	.....	.....	2.50	11.00	63.50	
1937	2.50	10.50	8.00	1.00	.....	.....	.....	.....	1.50	2.50	15.50	41.50	
1938	4.50	7.00	1.50	1.50	.....	.....	.....	.....	.....	10.00	7.00	31.50	
1939	27.00	2.50	0.50	1.00	.....	.....	.....	.....	1.00	9.50	7.50	49.20	
1940	15.50	8.50	2.00	2.00	.....	.....	.....	Aug	.....	.....	.....	.....

..... through the

Graph, Showing the Annual Snow fall in Inches at Arbovale,

From 1924 to April 1940 No Days Missing. Elevation 2727 Feet

H. S. Sutton Observer.



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Annual and Monthly Temperature in Degrees showing the Maximum, and -
 Minimum per month, during the year, No dates missing from 1925 to 1940
 taken at Arbovale by H. S. Sutton Cooperative Observer

YEAR	Maximun Minimum	Jan	Feb	Mar	Apr	May	June	July	Aug	Sept	Oct	Nov	Dec
1925	Maximun Minimum	46 -16	56 8	62 04	82 20	82 26	83 42	82 40	83 34	88 42	86 20	56 15	53 04
1926	Max- Min -	51 08	57 2	60 9	72 17	80 29	81 36	89 38	90 47	82 44	80 20	61 10	48 6
1927	Max- Min -	56 0	64 20	72 12	77 18	86 28	81 36	82 38	78 41	82 29	84 24	68 18	58 6
1928	Max- Min -	56 04	51 8	66 8	68 16	76 24	80 28	86 42	86 52	75 27	76 12	58 8	50 4
1929	Max- Min -	57 04	48 04	74 0	74 21	77 27	80 30	82 34	78 36	83 26	66 22	64 06	54 08
1930	Max- Min -	56 -9	62 -16	58 2	77 22	80 28	88 28	98 38	100 32	87 33	73 6	65 4	50 -18
1931	Max- Min -	50 -13	48 10	59 14	73 26	86 28	92 34	95 48	90 38	86 32	72 22	66 14	58 08
1932	Max- Min -	66 14	70 10	60 -2	70 16	78 29	80 31	82 40	82 42	92 24	65 18	56 0	58 8
1933	Max- Min -	54 -1	52 -10	56 01	68 17	76 33	82 30	83 34	76 39	83 42	72 15	72 -8	58 -4
1934	Max- Min -	52 10	47 -25	58 -2	70 16	84 32	86 38	92 46	83 39	82 28	76 18	58 10	48 -2
1935	Max- Min -	58 -18	50 01	64 12	72 12	73 28	77 36	78 53	80 39	74 26	72 17	67 04	44 -12
1936	Max- Min -	40 -16	54 -7	62 15	70 12	82 26	82 32	88 40	90 40	90 28	70 16	66 07	44 0
1937	Max- Min -	54 14	64 04	58 1	74 18	80 26	84 42	82 38	85 46	80 26	74 16	62 04	48 -5
1938	Max- Min -	48 02	55 06	74 12	76 18	86 28	76 32	78 44	84 38	76 38	81 16	66 -16	46 -9
1939	Max- Min -	53 -10	61 02	68 -2	80 12	82 18	95 40	86 36	90 42	86 30	76 13	62 8	54 0
1940	Max- Min -	46 -17	40 -3	64 03	72 10	82 18	84 30	96 33	80 42				